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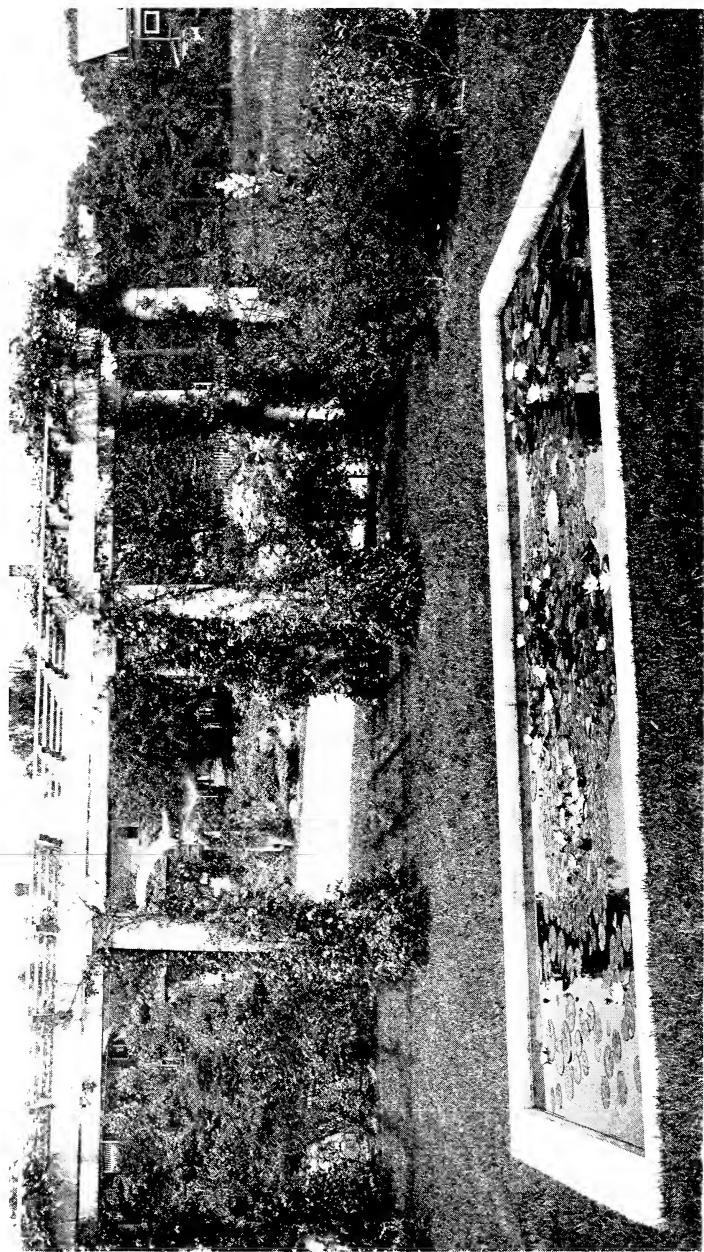


SEEKING along on the train one day last summer, my eye caught a glimpse of a pond, by the side of the railroad track, that was covered with the pads of our native white Lily. As it was getting late in the afternoon, I saw but few flowers open, but those that were open inspired a happy feeling in my heart. The pure white flowers with their golden centers seemed to teach a beautiful lesson. Here the Lily seemed to rise above its environment and to teach that wherever we live or work it matters only that we bring forth the best that lies within us.

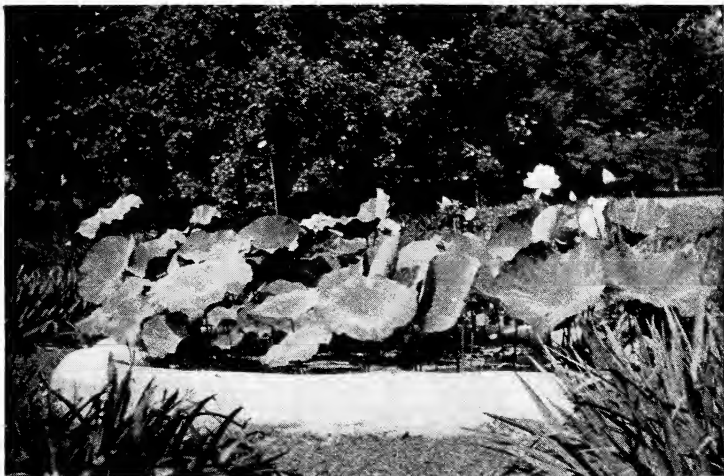
In its own place the Lily stood out queenlike, supreme. Birds sang its praises during the day, and sunsets, such as no painter ever achieved, closed its petals at night. These beautiful flowers were the result of growth—perhaps even a struggle for existence—and they brought these lines to my mind.

*O star on the breast of the river,
O marvel of bloom and grace,
Did you fall right out of heaven
Out of the sweetest place?
You are white as the thoughts of an angel;
Your heart is steeped in the sun;
Did you grow in that beautiful City
My pure and radiant one?*

*Nay, nay I fell not out of heaven,
None gave me my saintly white;
It slowly grew in the darkness
Down in the dreary night.
From the ooze of the silent river
I won my glory and grace,
White souls fall not, O my poet!
They rise to that sweetest place.*



This picturesque pool contains six varieties of Nymphaeas—the Arlington Trio, with Gloriosa, Pygmæa and Pygmæa Helvola.
Garden of Mr. Wm. E. Davis, Jr., New Haven, Conn.



TO HELP IN MAKING UP YOUR ORDER FOR PLANTS



PRICES are quoted net. All goods travel at purchaser's risk and expense.

Shipping. All plants will be packed with the best of care to secure safe transit, but under no circumstances do I undertake responsibility for delay or damage to goods during transit.

Parcel Post. Small plants can be sent by parcel post, but delays occur very often. Beyond the 3d zone it is not only more satisfactory but even cheaper to send by express.

I do not prepay postage, therefore please allow sufficient extra to pay postage; any money in excess will be returned.

I Guarantee my plants to be true to name, and in good condition when shipped; but I cannot be responsible for results. Unusual climatic conditions and disregard of planting instructions are entirely beyond my control.

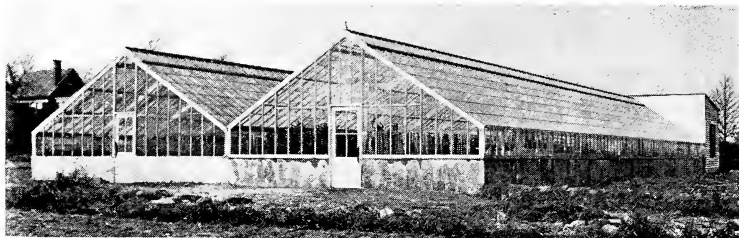
Complaints, if any, as to quality of goods, etc., can be entertained only when made **immediately on receipt of goods**. I shall always be ready to advise in regard to planting water-gardens, and selections of varieties for certain purposes, and invite patrons to consult with me.

Place Order Early for spring delivery and prevent delay of shipment or planting.

Open Accounts. Financial references must be sent to open an account. No account opened on an initial order of less than \$10.

This is our 1920 Catalogue and cancels all other previous price-lists

WM. TRICKER, ARLINGTON, NEW JERSEY



A Word About Water-Lilies in General

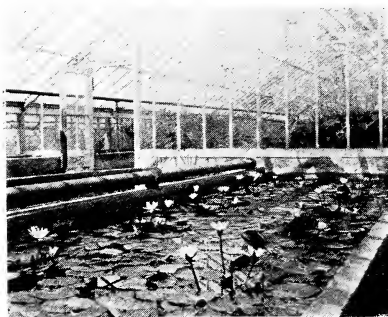


THE increasing interest in Water-Lilies is worth taking a few moments to consider. The natural charm of their growing-place is always enhanced by the beauty of these flowers. The development from the native varieties of various countries has been quite recent. *Nymphaea odorata* and *N. tuberosa*, natives of our northern states, have been used in producing these types. *Nymphaea flava*, of our southern states, supplied the first yellow foundation. The *N. alba* of the European continent furnished the most desirable white to begin with, and the native red Lily of Sweden has been of great value in producing the beautiful shades of pink and red.

The work of hybridizing these hardy Lilies was done mostly in Europe. M. Latour-Marliac has given to the horticultural world many remarkable and truly wonderful varieties. Of recent years, several hardy Lilies, mostly of pink shades, have been developed in this country. Now, in the hardy types, we have many varieties in white, pink, and various shades of pink to red and crimson, yellow, and many yellow ones shaded with other colors.

The development of the tropical Lilies has been done mostly in this country. In the late eighties, William Tricker, then a private gardener, became greatly interested in aquatic plants, and he imported many hardy and tender Lilies. For several years his interest steadily grew, until, in 1893, he commenced the growing of these plants in a commercial way. In his hybridizing of tropical Lilies, the white of Mexico, the red and purple

of Africa, and the blue of Egypt were used as a beginning. Plants producing flowers of extraordinary size and of marvelous colors were obtained. Notable among his introductions were Mrs. C. W. Ward, pink; Pulcherrima, blue; and William Stone, purple. A growing interest and demand for these plants called for more attention and a bigger growing capacity. Merging his interest with a large horticultural firm, he had at his disposal more greenhouse space and outdoor ponds. Yearly the business increased.





While the "grown-ups" may take pride in the pool of dainty Lilies, the children have real fun watching the fish that slip, like flashes of gold, under the broad pads

In 1910 the growing of Water-Lilies and aquatic plants, excluding everything else, was taken up at Arlington, N. J., and today it is the largest establishment of its kind in the world. The two modern greenhouses, as shown in the illustration on page 4, are occupied by concrete tanks and pools and all are so arranged as to make growing conditions ideal. Outdoors the sunken concrete pools are used for the growing of *Nelumbiums*, and farther away is a large open pond where most of the hardy Lilies are raised.

Two and one-half acres of land adjoining the greenhouses are used for the growing of such perennials as will thrive in moist ground. Thus, those plants that will grow in the water, on the water, and near the water are the only ones raised.

It was in this location that the varieties Mrs. Wilson, Panama-Pacific, and Mrs. E. T. Bedford were originated, and from this place other varieties of worth have been distributed. The entire country is the selling field and in the spring every state in the Union is reached by many shipments. The increasing demand from year to year shows the greater interest given to these beautiful flowers. While the large public and private parks can have extensive collections, it is quite possible for anyone, even of modest circumstances and room, to enjoy these beautiful flowers.

THIS CHAPTER TELLS HOW EASILY WATER-LILIES CAN BE GROWN

The culture of Water-Lilies is so simple that it might almost be said that "they just grow themselves." Their modest requirements are *sun, water, and rich soil*. In deciding on a place for a natural water-garden, one is naturally led to select a low spot. A stream of water running through this or near it can easily be dammed or diverted so as to form a pond. The digging up and grading of the ground to be flooded is the first consideration.

Of course, it is not possible for everyone to have such a location, but almost everybody can have built or can themselves construct an artificial



A large estate offers ideal situations for Water-Lilies and Aquatic Plants. This picturesque pool is on the estate of Mrs. Herbert Bentley, North Bend, Ore.

pool. In this event, any location that is available would be satisfactory, provided it is exposed to the full sun. The construction of an artificial pool is taken up on page 9 of this catalogue. These directions were written by an expert and anyone can follow them easily.

Rather than have no water-garden at all, the interested party can grow many of the varieties in tubs or half-barrels sunk in the ground. The selection of Lilies suitable for tub-culture is easily made, as the varieties suited for this purpose are indicated in the catalogue.

SOIL. The matter of getting the soil ready for the growing of aquatic plants is important. In preparing a piece of ground about to be flooded, it is well to dig into the soil a generous amount of thoroughly rotted manure, with the addition of a small amount of bone-meal. An excellent soil for use in tubs or artificial pools is made by mixing three parts of rotted sod, compost, or good top-soil with one part of cow-manure. If impossible to secure cow-manure, good barnyard manure may be used. All manure used must be thoroughly decomposed, to prevent fermentation when covered with water. Ground bone or bone-meal may be used if necessary, at the rate of one quart to one bushel of soil.

SIZE OF POOL. The larger the water-surface the better the results. A tub or half-barrel 2 feet in diameter will furnish a miniature pool. An artificial pool should be made as large as possible, and 2 feet deep. Where clay is very abundant, it is quite possible to line an excavation with this in such a manner as to have it watertight. Make an artificial pool as natural as possible and avoid stern lines and too apparent masonry. A generous planting of moisture-loving plants around the edge of the pool or pond will furnish an added charm to the plants in the pool itself. Such plants as are suitable for this purpose are listed in this catalogue.

WATER. One foot of water over the soil is the most desirable depth in artificial pools. Some will thrive in shallower water, but few will stand a depth exceeding 2 or 3 feet. A continuous flow of water tends to keep the temperature in the pool low and must be avoided. After the pool is once filled it is only necessary to replenish that which evaporates. An occasional syringing in the afternoon will supply this and will benefit the plants.

HOW TO PLANT. To plant in natural ponds, where the water does' not exceed 2 feet, it is only necessary to press the rhizome (the hard, fleshy part of the root) into the mud until the crown (the growing end) is just beneath the surface of the mud. If the root shows a tendency to float, a flat stone or brick may be employed as a weight to hold it down. To plant in a depth exceeding 2 feet, it is best to start the plants in baskets of good soil. Place these in shallow water and when the plants are rooted and making growth they may be sunk at the desired place.

In artificial pools that are not large, one foot of soil may be spread over the floor of the pool. For large pools there is no better plan than that of using boxes 2 to 3 feet square and 1 foot deep. By adopting this plan, it is quite possible at any time, even when the plants are in full growth, to move the entire box of soil. All soil in artificial pools should be covered with a generous layer of sand to prevent anything rising from the soil to discolor the water.

For tub-culture, fill the tub two-thirds full of soil, cover with sand, and fill with water.

WHEN TO PLANT. Hardy Lilies begin to grow in the latitude of New York City about the end of April. At this time I begin to ship hardy stock to southern points and the Pacific Coast. As the season advances I ship according to weather conditions. Tender Lilies should not be planted out until warm, settled conditions are assured. This is usually about the end of May in the latitude of New York City.

HOW FAR APART TO PLANT. In small ponds allow from 3 to 5 feet each way. The idea of group planting in large ponds is most effective. Plant six or more plants of one variety in a group and let each group be 20 to 30 feet apart. The individual plants can be planted 18 to 24 inches apart. In this manner a very fine showing may be made. In tubs or half-barrels one plant is all that can be accommodated; that plant should be of moderate growth.

WINTER CARE. The one condition necessary for the safe wintering of hardy Lilies is to see that the roots are not actually frozen. This is provided in natural ponds by a sufficient depth of water. Artificial pools may be drained and then filled with leaves which will provide the necessary protection; or the pools may be covered with boards and a covering of manure or leaves placed on top. Tubs may be treated the same way or removed to a root-cellar for the winter.

Tender Lilies had best be considered as annuals, for unless one has the proper facilities for caring for them under glass, it is useless to attempt keeping them. Young growing plants, purchased at the right time in the spring, give greater satisfaction and save much trouble.

GOLDFISH AND MOSQUITOS. Any fish in the pool are attractive and serve to destroy the wigglers that hatch into mosquitos and larvæ of other insects. One or two fish are all that would be needed in a tub, and a dozen would stock a 15-foot pool.

INSECT PESTS. The insects met with in the growing of aquatics are mostly the green and black aphids. These collect on the upper surface of the leaves or any part above the water, where the fish are unable to reach them. They may be kept down by using a strong force of clean water to wash them off into the water where the fish may devour them. A solution of Aphine, mixed according to directions on the container and applied in a very fine spray, will destroy them.

Muskrats are sometimes troublesome in natural ponds and should be exterminated by the use of steel traps.

GREEN SCUM. This often forms on the surface of the water in the spring,

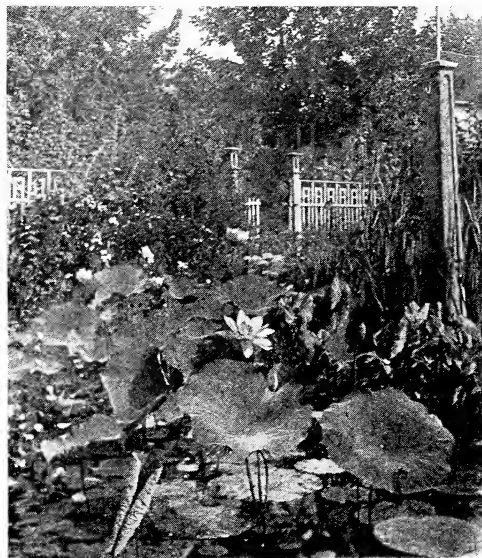
especially if fresh soil has been used or the soil disturbed. It does not last very long, especially after the Lilies begin to make strong growth. When really unsightly, this scum can be carried off by allowing the pool to overflow. It is safer not to attempt its destruction by the use of any chemical because of the very possible damage to the plants or fish.

REPLANTING HARDY LILIES. It will be necessary to provide new soil every second or third year for plants grown in boxes or tubs. Remove as much of the old soil as is possible without disturbing the roots, and replenish the soil. After several years the plants will have to be divided and separated.

FERTILIZING. This can be accomplished by applying ground bone early in the spring directly to the boxes, when so planted, or by broadcasting it over the surface of the water. It is quickly taken up by the water and furnished to the roots of the plants.

PACKING. All goods are packed carefully, to assure safe arrival. One customer from the state of Washington wrote last season that "the plants arrived in perfect condition and it was almost impossible to believe that they had actually crossed the continent." Of such a record I am proud and will always do everything in my power to see that every customer is just as well pleased. We ship anywhere and do not hesitate to assure you that goods, unless delayed by some unusual circumstance or mishandled, will arrive in good condition.

ASSISTANCE in the selection of varieties or in making suggestions will be gladly given. I aim to be of real service to my patrons. In requesting information, always give as full a description of your conditions as possible in your first letter. It will save time.



Aquatic plants lend themselves to innumerable groupings, and always present new forms of loveliness. This is in the garden of Mr. P. A. Taverner, Ottawa, Ontario.

Began to Bloom in Less than a Month

Under date of October 4, 1919, a good friend in Dallas, Texas writes me as follows:

"I planted the roots on May 20, and in less than a month they began to bloom, Chromatella first. I have had from one to six blooms every day since; today, October 4th, there are three grand Capensis and two Gracilis in bloom with many buds showing. White Numbium has two blossoms."

Mr. H. M. Rolph, of Ontario, Canada, received the plants the latter part of May. On June 27th he wrote me:

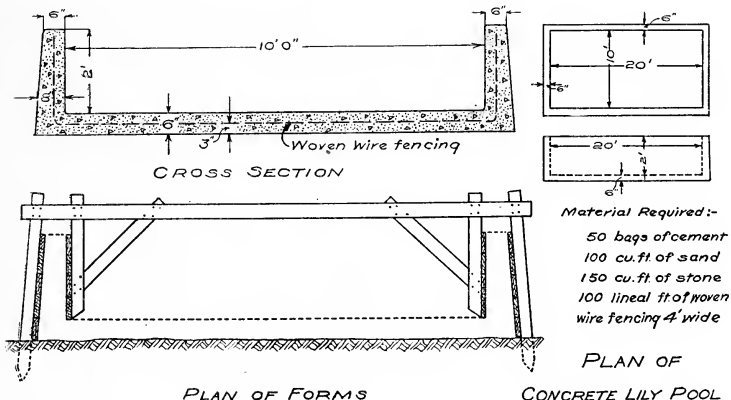
"Three are in bloom already, and have been much admired by visitors to my garden."

CONCRETE LILY-POOL

A concrete Lily-pool will give perfect and permanent satisfaction. It is simple and inexpensive to construct and will always stay in perfect condition. The concrete pool is entirely suitable for growing Water-Lilies. On this page is given a plan for a pool 20 feet long, 10 feet wide, and 2 feet deep. From this plan and the description given below any competent concrete constructor can build it.

Excavate the necessary depth and thoroughly compact the earth by tamping until it is uniformly firm. Then erect the form as shown in the cut. The forms for the inside of the walls are hung from the cross braces. In this way the concrete for the entire pool can be poured at one operation and joints will be avoided. Just before placing the concrete, thoroughly drench the ground so that it will not absorb the water from the concrete. Place a layer of concrete 3 inches thick on the ground, and on top of this place the woven-wire reinforcing, cut to the right length, so that it will project up into the walls to within 2 inches of the top. Lap the edges of the reinforcing 6 inches and bind together with wire. Then place the other 3 inches of concrete for the bottom and fill the wall forms.

Use a concrete mixed in the proportion of one part of Portland cement, two parts of sand, and three parts of stone. Work it thoroughly into the forms so that it will be as dense as possible. Remove the forms as soon as the concrete has hardened sufficiently and finish the surface by rubbing with a brick made out of a clean mixture of concrete. Sprinkle the concrete once a day for ten days and at the end of three weeks it will be ready for use.



Dear Sir:—I am enclosing a few prints showing the pleasure that Tricker's plants gave one little girl last season. These pictures were taken only a short time after the pool was built, so do not show the beautiful display of Lilies she had from spring until frost.

No small investment ever gave so great returns in pleasure to ourselves and our friends as the few dollars spent for your Lilies and their appropriate setting.

Sincerely yours,

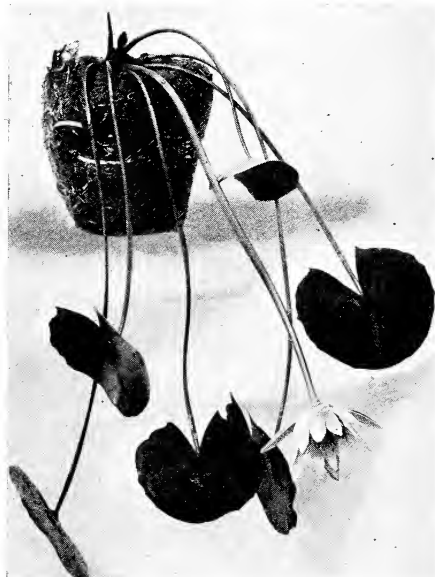
F. J. CAMBERN, Fredonia, Kans,

GROWING TENDER OR TROPICAL LILIES

The tender or tropical *Nymphaeas* are all started in tanks in our green-houses. The young plants are started in pots and are turned out of these before packing. They make very rapid growth but should not be planted

out until warm settled weather is assured. In our latitude (that of New York City) this is the latter part of May or early June. The plants soon begin to flower, leaves and flowers getting larger as the plant develops. The climax is reached in August. All the tender Lilies are free blooming and do their best during the hot weather.

This class of *Nymphaeas* is best suited for artificial pools. A box of soil 2 feet square and 1 foot deep is none too much to provide for each plant. A surface space of at least 25 square feet should be allowed. For an unusual display, plant two plants in a 3-foot box and allow a little more surface space. The flowers of all the tender Lilies are produced on stout stems and are borne well out of the water. They are most desirable for cut-flowers, lasting from three to five days. The

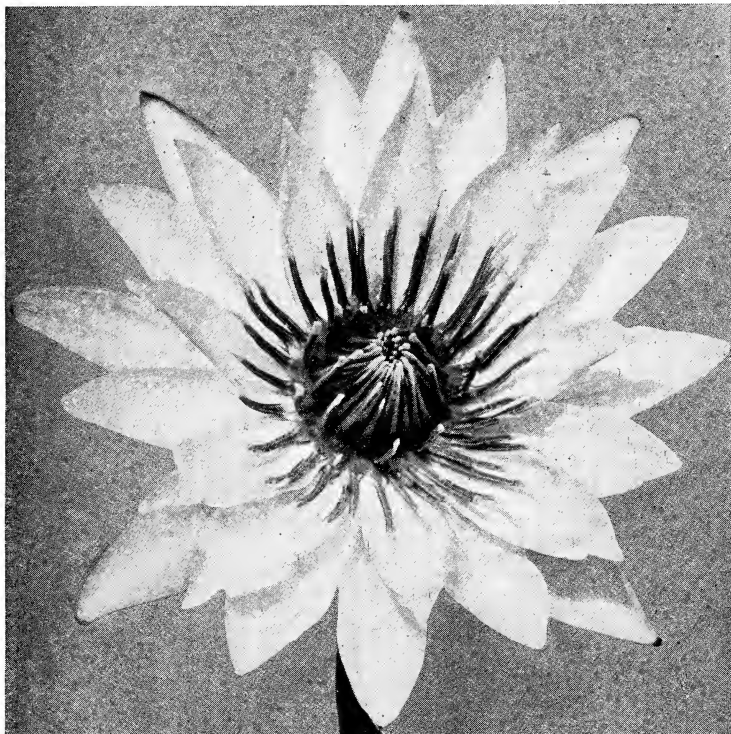


This shows the forms and vigor of our potted tender Lily plants

flowers close at night and open the following morning, except in case of the night-bloomers, which open in the evening and close the next morning.

The size of the bloom depends greatly on the room given to the plant, the amount of good soil, and the warmth of the summer. The quantity of flowers produced is really remarkable. I have had plants that produced over 100 flowers in a single season. I noted this summer on one plant seven open flowers in one day. These were of varying ages from newly opened flowers to those five days old. The list beginning on page 11 gives those tender varieties that open their flowers in the daytime.

The Missouri Botanical Garden at St. Louis has for many years had a wonderful collection of Water-Lilies. The floriculturist, Mr. Geo. H. Pring, has given much time to the hybridizing of *Nymphaeas* and has produced several excellent varieties. By arrangement with Director George T. Moore I am pleased to offer for distribution the varieties described on the opposite page.



Mrs. Edwards Whitaker is one of the new large-flowering varieties

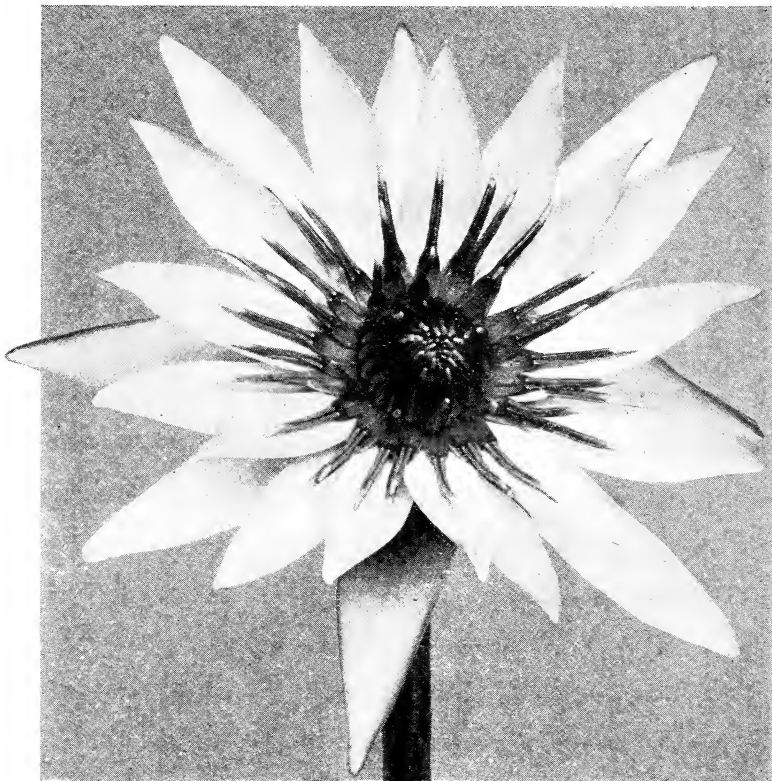
NOVELTIES IN TENDER LILIES

CASTALIFLORA. This variety produces very large flowers of a charming pink color, 8 to 10 inches in diameter. The very fragrant flowers open early in the morning and remain open until evening. The leaves are light green, mottled with brown on top and flushed with pink underneath. \$5 each.

MRS. EDWARDS WHITAKER. The largest flowering day-blooming hybrid, derived from the recently introduced *Ovalifolia* crossed with the many-petaled *Castaliflora*. The enormous flowers are often 13 inches in diameter. They are produced on stout stems a foot above the water and open for the entire day. The color upon opening the first day is lavender-blue, lightening as the flower matures, in four or five days. Very fragrant. See illustration. \$7.50 each.

WILSON GIGANTEA. This is a hybrid from our own Mrs. Woodrow Wilson crossed with *Castaliflora* and bears many of its characteristics. The variety that Mr. Pring has produced is however a much stronger grower and bears larger flowers. These are 7 to 8 inches across and rise a foot above the water. The color is dark lavender-blue. \$3.50 each.

STELLA GURNEY. A spontaneous seedling, raised in Tower Grove Park, St. Louis. The parentage, recently proven by Pring, determines it a seedling from Mrs. C. W. Ward. It is a very strong, free-blooming variety. Flowers many, light rose-pink. Leaves light green, bearing extremely long petioles. \$5 ea.



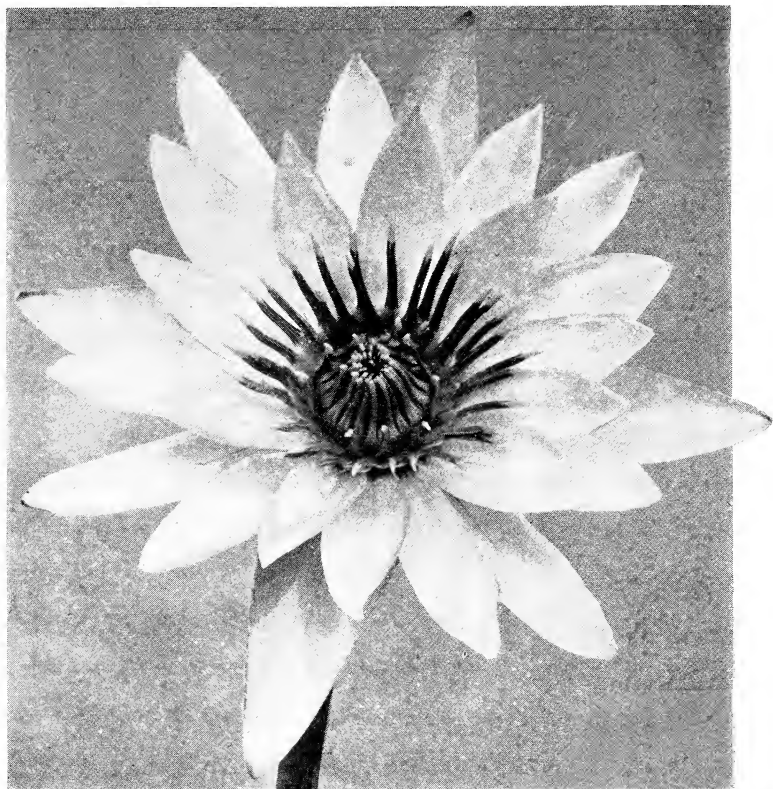
The deep rose-pink of Mrs. C. W. Ward is dazzling in its beauty; the size of the flower is an added charm. (See page 13.)

STANDARD LIST OF TENDER NYMPHÆAS

Capensis. The flowers of this variety are a rich sky-blue, 6 to 8 inches in diameter. The sepals (the outer part of the flower forming the bud) are green outside, whitish inside, flushed with pale blue. A free-flowering variety and very useful for cutting. \$1 each.

Cœrulea. This is the ancient blue "lotus" of the Nile. The flowers are light cœrulean blue, fading to nearly white at the base; stamens yellow, outside of the sepals marked with black lines and dots. Flowers 4 to 6 inches across, with pointed petals, and are produced in generous quantity. \$1 each.

Daubeniana. This variety is of European origin and is remarkable in that young plants spring from the upper surface of the leaves, over the point where the leaf joins the stem. These young plants begin to flower early and make an unusual display. I have seen plants that had been set out but eight weeks bearing large flowers from the center and surrounded by many leaves with young flowering plants upon them. On one specimen I counted 56 small flowers. The color of the flower is very light blue, delicately scented, and attaining a size of 5 inches. When shown before the Newport Horticultural Society for the first time this variety was awarded a silver medal. \$1 each.



Pennsylvania is distinguished by the deep rich blue of the petals, as well as by the size of the flowers. (See page 14)

STANDARD LIST OF TENDER NYMPHÆAS, continued

Gracilis. This is the only white day-flowering tender Nymphæa. The leaves (often 15 to 17 inches across) are green in color and the flowers often attain a diameter of 8 inches. The stems are stout and bear the sweetly scented flowers well above the water. My strain of Gracilis is unusually good; awarded Certificate of Merit by the Society of American Florists at Houston, Texas. \$1.50.

Ernst Ludwig. This hybrid of the Stellata type produces enormous flowers of a violet-blue color. It is a very early and continuous bloomer. Being a very vigorous grower it should be allowed ample space. \$2.50 each.

Mrs. C. W. Ward. This splendid variety was produced from *N. gracilis*. It has the free-blooming characteristics of its parent, but produces a very much larger flower, deep rose-pink—almost red—in color. The stamens are yellow and the flowers rise well above the water. (See illustration, p. 12.) \$2 each.

Mrs. Woodrow Wilson. This is one of my hybrids from *Daubeniana* and bears the same leaf characteristics. This variety is, however, much stronger-growing than its parent and produces lavender-blue flowers of much greater size. The stamens are yellow, tipped with the color of the petals. (See illustration in color on fourth cover.) \$2.50 each.

STANDARD LIST OF TENDER NYMPHÆAS, continued

Ovalifolia. This variety of African origin produces flowers of the largest size. Upon opening the first day the flowers are very pale, almost white, but as they mature, a shade of blue suffuses it. It is very free-blooming and the flowers are sweetly scented. \$.75 each.

Panama-Pacific was produced in Arlington quite recently. It is everblooming, viviparous, strong-growing, and free-flowering. The buds, as they come out of the water, are bronzy green spotted with a reddish brown, opening rich, rosy red, which is quite pronounced in the full sun. When fully opened, the predominant color is reddish purple and the stamens are yellow. This is a new and distinct color in Water-Lilies. An excellent variety for the conservatory in winter. (See illustration in color on fourth cover.) \$3.50 each.

Pennsylvania. This is, in reality, simply an improvement on *Pulcherrima*, next listed, but while possessing all the good points of this excellent variety, it surpasses it in size of flowers, which are also a deeper and richer blue. (See illustration.) \$2.50 each.

Pulcherrima. Of all the standard varieties, this is probably the most beautiful of the hybrid tender *Nymphæas*. Its flowers measure 10 to 12 inches in diameter and are of a delightful light blue color. The yellow stamens form a pleasing contrast to the petals. The sepals are marked on the outside with black lines and dots and the leaves are spotted on the under side. A very free and continuous flowering variety. \$2 each.

William Becker. An improvement on the variety *William Stone*. It is identical with that variety, except that the flowers are more violet-purple and somewhat larger. \$2.50 each.

William Stone. This variety was produced from *Gracilis*. The purple flowers attain a diameter of 5 to 7 inches and have purple stamens and a yellow center. They open early in the morning and do not close until late in the afternoon. They are carried well above the water. \$2 each.

Zanzibariensis. The superb Water-Lily from Africa. The color is of the deepest purple. Flowers measure 6 to 8 inches in diameter, are strongly fragrant and produced very freely. \$1.50 each.

Zanzibariensis azurea. A seedling variation from the above. The flowers open wider and are blue in color. \$1 each.

Zanzibariensis rosea. Another seedling variation from the type. The flowers are various shades of rose-pink, and the leaves are pink on the under side. In other characteristics it varies but little from the type. (See illustration, page 15.) \$1 each.

NIGHT-BLOOMERS

These *Nymphæas* are different from the day-blooming sorts in that the flowers open early in the evening, remaining open all night and until the sun gets very bright in the morning. For evening or night decoration they are unsurpassed.

Bissetii. A night-bloomer of unusually free-blooming habit. The flowers are of a beautiful rose-pink color, 8 to 10 inches across; the petals are broad and slightly concave, giving the bloom a cup-shaped form. \$2 each.

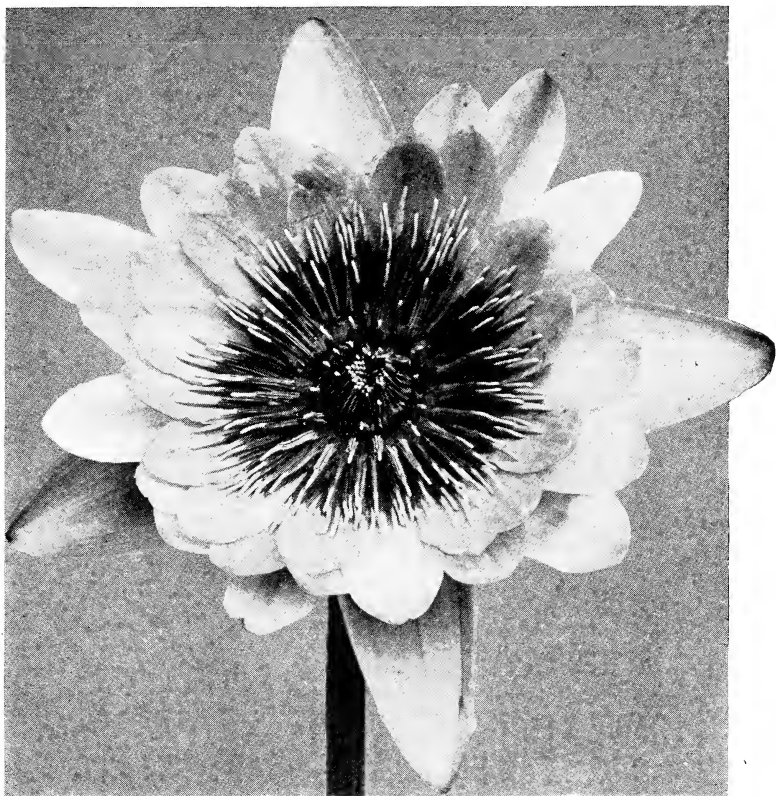
Dentata. The flowers are of the purest white, 8 to 10 inches in diameter, and are produced very freely. The petals open out horizontally. \$1 each.

Dentata magnifica. The very wide, slightly concave petals of this variety give the appearance, when open, of a cup. In color the flowers are creamy white and they often attain a diameter of 12 inches; the stamens are pure yellow. \$2.50 each.

Dentata superba. This is a seedling from *N. dentata*, with flowers 8 to 12 inches across. The petals are very wide, pure white in color, and open flat. The stamens are yellow, and the variety is very free-blooming and most desirable. \$3 each.

Devoniensis. The bright rosy red flowers are 8 to 10 inches across, and are borne on stout stems, well out of the water. The plant blooms most freely and is one of the most desirable of the night-bloomers. \$1 each.

Deaniana. A strong and vigorous plant, with bronzy green leaves crumpled at the margin. The flowers are pure, light pink; sepals deep rose-pink and stamens red. \$1.50 each.



Nymphaea Zanzibariensis rosea. (See page 14)

NIGHT-BLOOMING NYMPHÆAS, continued

Frank Trelease. A superb variety. The rich crimson flowers are 8 to 10 inches in diameter, and the stamens are mahogany-red. The leaves are very attractive, being dark bronzy red. A most desirable variety. \$1.50 each.

George Huster. A free-growing and free-blooming variety. Flowers 10 to 12 inches across and of a crimson color. A desirable acquisition to the list of night-blooming Nymphæas. \$2 each.

Jubilee. The flowers of this variety are of great substance, creamy white flushed with pink at the base of the petals. An excellent variety. \$1.50 each.

Omarana. A very vigorous and strong-growing variety, producing flowers of the greatest size. The color is reddish pink with almost white stripes in the center of the petals. \$1.50 each.

Rubra rosea. The oldest and best red night-bloomer in cultivation. The flowers are rosy carmine in color and attain a size of 8 to 10 inches. The plants grow very freely and produce many flowers which are always a delight to flower-lovers. \$1 each.

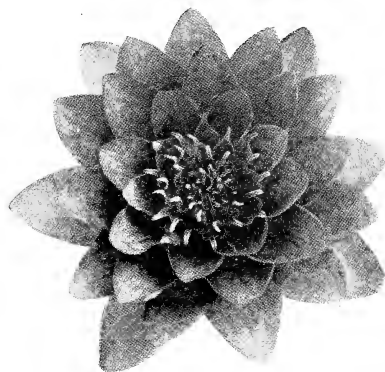
Kewensis. Very pale pink flowers; moderate grower, but free-flowering. \$1.50 each.

CULTURAL NOTES FOR HARDY NYMPHÆAS

The hardy Lilies or Nymphæas are best adapted for natural ponds, where the roots may be planted directly in the mud at the bottom. They may also be used to advantage in large artificial pools, and certain of the moderate-growing varieties are suited for small pools and tubs. The matter of planting and spacing is taken up in the general cultural notes in the fore part of this catalogue. In placing in natural ponds, avoid planting too near springs or any cold inlet. There is no hardy blue Lily. The one thought to bear in mind in regard to hardy Lilies is that they are hardy as long as the roots are not actually frozen or disturbed by the ice. A sufficient depth of water will afford all the protection needed.

NEW AND RARE NYMPHÆAS

ATTRACTION. This wonderful French introduction is one of the finest hardy Lilies ever produced. The flowers often measure 8 inches across and are produced very freely. Upon opening, the color of the petals is garnet-red and the sepals almost white; stamens yellow, lightly touched with mahogany. As the flowers mature the color deepens until it becomes a pronounced dark red and the sepals are streaked with garnet. A most worthy and valuable addition to any collection. (See illustration.) \$12.50 each.



Nymphaea, Attraction

ESCARBOUCLE. A most attractive and meritorious variety. The flowers are most striking in color, being a uniform vermillion-red. A free bloomer and a strong grower. Sure to become popular. \$12.50 each.

FORMOSA. A large-flowering, clear pink Lily, with petals broad and incurving. \$10 each.

PAUL HARIOT. A grand and magnificent variety, producing flowers of largest size. Upon opening, the first day the flowers are clear canary-yellow, the second day they are shaded

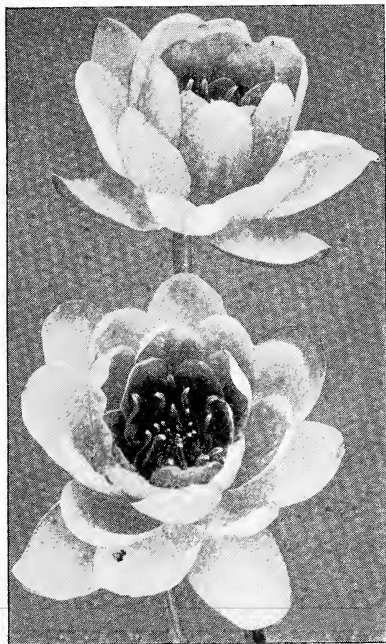
with pink at the base of the petals, and on the third day this pink suffuses the whole flower. Thus it presents the appearance of three different flowers. This variety is very free flowering, grows well under varied conditions, and has met with favor wherever seen. Mr. Brock, while Superintendent of Parks at Houston, Texas, wrote that "the variety Paul Hariot was much admired for the beautiful shading of the flowers." Awarded Certificate of Merit, by the Society of American Florists. (See colored illustration on third cover page.) \$1.50 each.

LOOSE. A beautiful, large, white Lily, 5 to 7 inches across, with a delightful fragrance. Especially desirable because of its freedom and continuance of blooming. The flowers open very early in the day. One of the best of the white Nymphæas. \$1.50 each.

PINK OPAL. While this novelty is not of exceptional size, it has some other unusual points. The color is an exceptionally deep pink, and the bud is of a peculiar rounded form, the petals being very short and of unusual substance. The outstanding merit is its lasting qualities as a cut-flower. \$2 each.

ROSE AREY. A wonderful variety of the Odorata type, very free flowering, and strong growing. The flowers are very large (last year we had flowers 8 inches across), and are sweetly scented. The color is clear cerise-pink and does not lighten toward the center of the flower. Awarded a Silver Medal by the New York Horticultural Society. \$2.50 each.

VESUVE. The flowers are of an amaranth-rose, extra large, free-blooming and constant. One of the very best dark-colored, hardy Nymphæas. \$5 each.



Nymphaea, Paul Hariot



Nymphaea, Sioux

CHOICE HARDY NYMPHÆAS

The choicest American and European hybrids are included in this collection. In the unique colors, exquisite tints, magnificence of form and substance of the flowers, they are not surpassed by any collection of Nymphæas. The prices at which the different varieties are offered will permit the owner of even the smallest garden to gratify his desires for a few of these splendid plants.

— **Andreana.** Flowers beautiful red and yellow; distinct and desirable variety. Can be grown in a tub. \$1.50 each.

— **Arethusa.** A free-flowering variety, with large blooms of brilliant crimson-pink. Desirable for both tubs and ponds. \$2.50 each.

— **Eugenia de Land.** This grand variety belongs to the *N. odorata* group, and is unequaled by any other of the same genus. Flowers extra large, of true *N. odorata* type, floating, petals long and lanceolate; color an exquisite shade of deep rose-pink of iridescent hues, with yellow stamens. Vigorous and free-flowering plants. Awarded Silver Medal by the Newport Horticultural Society September, 1912. (See illustration in full natural colors on front cover.) \$1.50 each.

— **Gloriosa.** A superb variety, with flowers 4 to 6 inches across, of deep carmine-rose. A free, continuous bloomer and a desirable Lily for general use in tubs or ponds. \$5 each.

— **Graziella.** Flowers orange-red; sepals striped red; stamens orange; leaves deep green, spotted maroon. Useful for tub culture. \$1.50 each.



Nymphaea Marliacea flammea

CHOICE HARDY

NYMPHÆAS, continued

Helen Fowler. A natural cross of the *N. tuberosa* type; strong and of vigorous growth; flowers are borne on stout stems, making it useful for cut purposes; deep pink and very fragrant. Certificated by the Horticultural Society of New York. 75 cts. each.

James Brydon. A superb variety, being a free grower with rosy crimson flowers, 4 to 5 inches in diameter. \$2.50 each.

Marliacea ignea. Flowers 4 to 5 inches across; deep carmine. A free bloomer of great merit. \$2 each.

Marliacea flammea. This is a very choice variety of easy culture. The flowers are produced in profusion and are wine-red in color which deepens as the flower grows older. The green color of the leaves is mottled with brown. It is of moderate growth and can be successfully grown in a tub. (See illustration.) 75 cts. each.

Marliacea rubra punctata. Flowers deep rosy purple, spotted carmine; stamens orange-red. A choice variety; free, continuous bloomer. \$2 each.

Sioux. Large flowers of rich, brassy yellow, shaded red; petals lanceolate; stamens deep yellow; bronzy green foliage, spotted reddish brown. This is a French

novelty. (Illustrated on page 17.) \$2 each.

Tuberosa rubra. A new hybrid, with flowers 5 to 7 inches across, of a beautiful shade of rosy red; stamens red. Has a rich fragrance. \$1.50 each.

GENERAL LIST OF HARDY NYMPHÆAS

Alba candidissima. A vigorous and desirable variety. Flowers good-sized and pure white. An early and free bloomer. 75 cts. each.

Gladstoniana. Flowers dazzling white, 6 to 8 inches across; petals concave and broad. A free and continuous bloomer and one of the finest white Lilies in cultivation. Should be allowed plenty of room, as it is a very strong grower. \$1 each.

Laydekeri lilacea. Flowers 3 to 5 inches across, rosy lilac, shaded bright carmine, with a tea-rose fragrance. Very desirable for tub culture. \$1.50 each.

Laydekeri purpurea. A free-blooming variety; flowers medium-sized, rosy crimson, with reddish orange stamens. Does well in tubs. \$2 each.

Marliacea albida. A vigorous variety; flowers large, of sparkling whiteness; stamens light yellow, sepals flushed pink; fragrant and produced freely and continuously through the season. Very desirable and handsome. (See illustration on second cover.) 75 cts. each.

Marliacea carnea. Similar to the preceding save in color, which is of a soft flesh-pink, deepening toward the base of the petals. \$1 each.

GENERAL LIST OF HARDY NYMPHÆAS, continued

Marliacea chromatella. A free and vigorous grower; flowers 4 to 6 inches across, bright canary-yellow, stamens deep yellow; leaves deep green, beautifully blotched with brown. (See illustration in color on second cover.) \$1.25 each.

Marliacea rosea. Resembles *N. Marliacea carnea* in habit and growth; flowers large, deep rose-color; young leaves purplish red, changing to deep green. One of the best for cutting. (See illustration in color on second cover.) \$1.50.

SPECIAL OFFER. One each of *Marliacea albida*, *Marliacea chromatella* and *Marliacea rosea* for \$3. All *Marliacea* varieties will adapt themselves to tub culture. (See second cover for illustration in natural colors.)

Odorata. This is the fragrant Pond-Lily of the northeastern United States; flowers white, 3 to 5 inches in diameter, stamens yellow; leaves dark green above, under surface deep red to reddish green; splendidly adapted for planting in quantity in natural ponds. 25 cts. each, \$2.50 per doz.

Odorata minor. A small form of *N. odorata* and quite interesting. 25 cts. each, \$2.50 per doz.

Odorata, W. B. Shaw. Flowers large, of rich rose-pink and very fragrant. A strong grower and continuous bloomer. \$1 each.

Odorata exquisita. Flowers of a very intense rose-carmine; 3 to 5 inches across. Very attractive. \$1 each.

Odorata sulphurea. Flowers fragrant; 4 to 5 inches across; sulphur-yellow, standing well above the water. A desirable and unique variety. \$1 each.

Odorata sulphurea grandiflora. Very similar to the preceding variety, a stronger grower, foliage lighter in color. \$1.50 each.

Pygmæa. The smallest Water-Lily in cultivation; flowers white, 1½ to 2 inches across. A free bloomer and **ideal for tub culture.** 75 cts. each.

Pygmæa Helvola. A yellow *N. pygmæa*, a very dainty Lily and extremely free flowering. Very satisfactory **for tub culture.** \$1 each.

Robinsoni. Large, floating flowers of dark orange-red. A free bloomer and should be in every collection. \$2.50 each.

Tuberosa maxima. Flowers medium size, cup-shaped; pure white, with strong fragrance. 25 cts. each, \$2.50 per doz.

Tuberosa rosea. Flowers of an exquisite shade of pink, 4 to 5 inches across, standing well out of the water. 75 cts. each.

Tuberosa Richardsonii. Flowers white, 6 to 8 inches across, forming with its numerous petals a perfect globe when fully open. 75 cts. each.

William Doogue. A magnificent Lily. Flowers cup-shaped, 5 to 6 inches across, of beautiful shell-pink; deliciously fragrant. \$1.50 each.



NELUMBIUMS

The Nelumbiums, or Lotuses, are of famous lineage and ancient history. Their bold, massive leaves, borne on stout stems 5 feet or more out of the water and 2 to 3 feet in diameter, would alone compensate for their culture. They are of easy culture, but require very rich soil as they are very rampant growers and heavy feeders. They can be grown in natural or artificial pools or in tubs. They are perfectly hardy, provided the tubers which

form at the close of the season are not frozen. These tubers can be shipped about the beginning of May if weather conditions are favorable.

If dug in cold weather or before growth begins, poor results are sure to follow. Dormant tubers can be supplied for about six weeks, but after that pot plants only can be supplied and

at the prices quoted. Pot plants are produced by potting up tubers as soon as dug and placing them in one of our tanks under glass. Thus growth is started and maintained so that no delay occurs. The flowers begin to mature about July 1 and are magnifi-



Nelumbium speciosum

cently grand in appearance. They are borne on stout stems above the foliage.

Album grandiflorum. Flowers pure white, large, beautiful and fragrant. \$2 each; pot-plants, \$3 each.

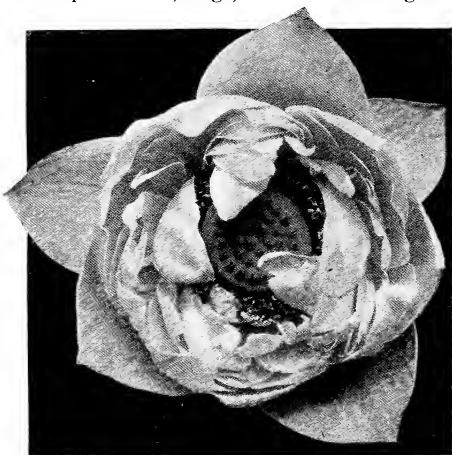
Kermesinum. A delicate rose-pink; early. \$1.50 each; pot-plants, \$2.50 each.

Kinshiren. White, shaded rose-pink; early-flowering. Useful for tub culture. \$2.50 each; pot-plants, \$3.50 each.

Luteum. The American Lotus, or Water Chinquapin. This is a native variety indigenous to the southern and western states, but grows well in our eastern states. Flowers are creamy yellow. \$1.50 ea.; pot-plants, \$2.50 each.

Osiris. A beautiful globular flower; deep rose. Blooms are produced in large numbers early in the season. \$2.50 ea.; pot-plants, \$3.50 each.

Pekinensis rubrum. Flowers brilliant rosy carmine, 10 to 12 inches across. Plants vigorous and free. \$2.50 each; pot-plants, \$3.50 each.



Pekinensis rubrum plenum

NELUMBIUMS, continued

Pekinensis rubrum plenum. This splendid *Nelumbium* is identical in color with the variety listed on page 20, but the flowers are very double, resembling a giant pæony. Double-flowering *Nelumbiums* are very scarce. (See illustration, page 20.) \$5 each; pot-plants, \$6.

Roseum. Deep rose-pink; beautiful globular flowers. \$2 each; pot-plants, \$3 each.

Roseum plenum. A magnificent variety, with large, full, double, bright rose flowers. Experienced cultivators consider it one of the finest *Nelumbiums* in cultivation. \$2.50 each; pot-plants, \$3.50 each.

Speciosum (Egyptian Lotus). Exquisite flowers of a beautiful rose-color; vigorous and free flowering. (See illustration, page 20.) \$1.50 each; pot-plants, \$2.50 each.



Victoria Trickeri grown under glass in pool with tender *Nymphæas* and tropical plants around edge. Victorias can be grown outdoors during the warm summer months

VICTORIA

Victoria Lilies require much space to develop their monstrous leaves, which are often 5 feet across, with rims upturned 5 to 7 inches. *V. regia* requires a high temperature for development, otherwise the season may close without a flower being seen. *V. Trickeri* succeeds well under the ordinary treatment for tender *Nymphæas*, but should not be planted out, or shipment made, before warm, settled weather is assured, usually about the middle of June.

Victoria regia (Royal Water-Lily). The well-known species. Plants, \$7.50 and \$10 each.

Victoria Trickeri. This species is of vigorous and rapid growth, and produces its marvelous flowers at an early stage. A single plant often has from ten to fifteen well-developed leaves and frequently two flowers open at the same time. The flowers are white when first open, changing to deep rose the second day, and have a strong fragrance not unlike a ripe pineapple. The flowers open at night. Plants, \$7.50 and \$10 each.



A pool in New Jersey, four months after planting. Tricker's plants, of course

MISCELLANEOUS AQUATICS

This list comprises such plants as will grow directly in water 2 to 12 inches deep or where the ground is constantly wet. They can be used to good effect in either natural or artificial pools. In the latter they may be planted in pots or small tubs and brought close to the edge, thus helping to hide a great deal of masonry.

ACORUS japonicus variegatus (Variegated Sweet Flag). One of the finest variegated plants in cultivation. 25 cts. each, \$2.50 per doz.

A. gramineus variegatus. A dwarf-growing variety; very pretty variegation; useful also as a pot-plant. 20 cts. each.

BUTOMUS umbellatus (Flowering Rush). Hardy perennial aquatic of easy culture on the margins of ponds. Leaves 2 to 3 feet long, iris-like; flowers rose-colored, on long scapes. 25 cts. each.

CALLA palustris (Water Arum). A dwarf perennial aquatic. A miniature Calla, an interesting plant for the margin of a pond. 25 cts. each.

C. Richardia (Calla Lily). One of the best water plants for summer use. Perpetual flowering; fine white flowers. Flowering plants, \$1 each.

CERATOPTERIS (Water Fern). A unique floating plant. 25 cts. each.

COLOCASIA multiflora (Japanese Water Taro). A very unique foliage plant.

The leaves are rich green, on dark purple stems. Can be grown as a house plant from tubers, using same cultural directions as for Chinese Sacred Lily (gravel and water in a shallow dish). As a marginal plant for the pool, it is very ornamental, as it will grow to a height of 4 or 5 feet. 25 cts. each, \$2.50 per doz.

CRINUM americanum. A native plant of the Florida swamps. It produces its flowers in umbels of six or eight large, white and very fragrant blooms. Grows in any kind of soil, but must be kept wet. 35 cts. each.

CYPERUS adenophorus. A variety coming from Brazil. It grows about 2 feet high and sends up a stout flower-stem. The flowers, greenish white in color, are produced in umbels and are quite interesting. Thrives well either as pot-plant or as a marginal plant. 25 cts. each, \$2.50 per doz.

MISCELLANEOUS
AQUATICS, continued

Cyperus alternifolius (Umbrella Palm). A very attractive plant for growing in small pools or in moist ground. 15 cts. and 25 cts. each.

C. alternifolius variegatus. A white-variegated form of the preceding variety; very distinct and attractive. 50c. and \$1 each.

C. gracilis. A dwarf-growing variety; very useful for aquariums or small tubs. 15 cts. each.

C. Papyrus (Egyptian Paper Plant). A very ornamental plant for the waterside. The triangular stems attain a height of 6 to 8 feet, surmounted with a tuft of long, thread-like leaves. 25 cts. and 50 cts. each; specimen plants, \$2.50 each.

EICHHORNIA crassipes major (Water Hyacinth). An interesting floating plant, with dark, lustrous leaves and delicate, rosy lilac flowers on large spikes. 15 cts. each, \$1.50 per doz.

E. azurea. Flowers of a lovely shade of lavender-blue, with a rich purple center; petals delicately fringed. 50 cts. each.

GLYCERIA spectabilis fol. var. A hardy perennial grass, desirable for low ground and margins of ponds; 3 to 4 feet; leaflets striped green. 25 cts. each.

HEDYCHIUM coronarium (Butterfly Lily). A tender subaquatic plant which forms in moist ground, a dense clump 3 to 6 feet high. The masses of pure white fragrant flowers look like large white butterflies. 25 cts. each.

JUSSIEA longifolia. A very attractive and desirable aquatic, growing 2 to 3 feet high, erect, slightly drooping at the points, and producing numerous axillary flowers of a rich golden yellow, like an evening primrose. A good plant for tubs or planting on the edge of a pond. 25 cts. each, \$2.50 per doz.

LIMNANTHEMUM indicum (Water Snowflake). A pretty, lily-like plant, producing masses of dainty snow-white flowers, beautifully fringed. 25 cts. each, \$2.50 per doz.

L. nymphaeoides. A hardy aquatic plant, with nymphaea-like leaves and bright yellow flowers, produced very freely. 15 cts. each, \$1.50 per doz.

LIMNOCHARIS Humboldtii (Water Poppy). A very pretty aquatic plant, with floating leaves and large, yellow poppy-like flowers; continuous bloomer. 15 cts. each, \$1.50 per doz.

L. Plumieri. An erect-growing plant, standing 1 to 2 feet out of the water, with elliptical leaves 4 to 6 inches long, of a velvety green. Flowers straw-color. 25 cts. each.

MARSELLIA Drummondii. A very pretty subaquatic plant with foliage resembling a four-leaved clover. Grows very quickly. 25 cts. each.

MENYANTHES trifoliata (Buckbean). A perennial aquatic plant, with creeping rootstocks in shallow water. Its beautiful, fragrant flowers, borne on stout stalks, are white, beautifully fringed and suffused with pink. 15 cts.



The Water Hyacinth is an interesting aquatic plant for the greenhouse or conservatory



The Water Poppy has large, floating leaves and straw-yellow flowers

MISCELLANEOUS AQUATICS, continued

MYRIOPHYLLUM proserpinacoides (Parrot's Feather). An aquatic plant having long, trailing stems, covered closely with whorls of most delicate foliage. Planted in a tub or water-tight hanging-basket, it will quickly grow over the edges and becomes a beautiful sight. 15 cts. each, \$1.50 per doz.

PISTIA Stratiotes (Water Lettuce). A floating aquatic. The leaves, which radiate from a common center, are soft and velvety; very pretty, and a rapid grower. 25 cts. each, \$2.50 per doz.

PONTEDERIA cordata (Pickerel Weed). A free-flowering plant, growing about 2 feet high and producing spikes of closely set, blue flowers. 15 cts. each, \$1.50 per doz.

SAGITTARIA montevidensis (Giant Arrowhead). Attains gigantic proportions, growing 4 to 5 feet high, leaves 15 inches long; flower-scape towers above the foliage, bearing white flowers, with dark blotch at base of each petal; suitable for margins or tub cultivation. 25 cts. each, \$2.50 per doz.

S. japonica fl.-pl. The double-flowering Arrowhead; very desirable for planting in tubs or on margins of ponds and streams. 50 cts. each, \$5 per doz.

S. sinensis (Giant Sagittaria). Leaves broad and strong, dark green; a free grower. Suitable for aquarium. 15 cts. each, \$1.50 per doz.

SALVINIA braziliensis. A dainty floating plant. Leaves soft green, covered with delicate hairs. Suitable for aquarium. 15 cts. a bunch, \$1.50 per doz.

SCIRPUS Tabernæmontanus zebrinus. A very ornamental, hardy rush, growing 3 to 4 feet high, producing leaves variegated with alternate bands of green and pure white. It may be grown as an aquatic or as a garden plant. 25 cts. each, \$2.50 per doz.

THALIA dealbata. A fine and stately aquatic, with canna-like leaves, to be grown in shallow water or wet soil. Hardy. 50 cts. each.

TRAPA natans (Water Chestnut). A hardy annual and very desirable for the aquarium, pool, pond, or tub culture. Foliage beautifully mottled or variegated; flowers white, small in proportion to the fruit or nuts which, when ripe, drop off and remain in the water until the following spring. 25 cts. each.

TYPHA latifolia. The well-known Cat-tail; very desirable for the water-garden. 10 cts. each, \$1 per doz.

ZIZANIA aquatica (Wild Rice). This native aquatic annual is very ornamental; its graceful panicles of bloom are produced on stalks 5 to 10 feet high; should be grown in shallow water. 10 cts. each, 75 cts. per doz.



Astilbe Hybrids are some of the best plants for the perennial garden

HARDY PLANTS

This list of perennial plants is suitable for growing in low, wet ground and in the borders and margins of pools and ponds. Under such conditions they grow most luxuriantly and produce unexpected results.

ASCLEPIAS incarnata (Swamp Milkweed). A good waterside plant, 2 to 3 feet high, with rosy purple flowers. Especially good in a semi-wild garden. 20 cts. each, \$2 per doz.

ASTER novæ-angliæ. Bright violet-purple. 15 cts. each, \$1.50 per doz.

A. novæ-angliæ rosea. Bright purplish mauve. 15 cts. each, \$1.50 per doz.

A. novæ-angliæ rubra. Deep reddish violet. 15 cts. each, \$1.50 per doz.

A., Beauty of Colwall. A most beautiful Aster of recent introduction; erect stems about 4 feet high, with an abundance of lavender-blue flowers. 25 cts.

A., Peggy Ballard. A dwarf form, very similar in color to Beauty of Colwall. 20 cts. each, \$2 per doz.

A., St. Egwin. The plant grows about 3 feet high, densely branched and of bushy habit. It produces fine, pure pink flowers in September, very valuable for cutting. This splendid Aster was given an Award of Merit by the Royal Horticultural Society, England; Certificate of Merit, Elberon Horticultural Society; Certificate of Merit, New Haven Horticultural Society; First-class Certificate of Merit, Newport Horticultural Society, Newport, R. I. 20 cts. each, \$1.50 per doz.

ASTILBE Davidii. A first-class plant recently introduced from China. The graceful flower-spikes are 5 to 6 feet high, with blooms of clear rosy violet. 25 cts. each, \$2.50 per doz.

A. grandis. Somewhat similar to the preceding variety, but more vigorous; often 6 feet in height, with large, pinnate leaves 2 feet in length, and panicles of white flowers 2 to 2½ feet long. 25 cts. each, \$2.50 per doz.

A., W. E. Gladstone. A very free, large-flowering variety, snow-white flowers; very desirable for moist, shady places, flowering in June and July. 25 cts.

HARDY PLANTS, continued

Astilbe, Queen Alexandra. A beautiful hybrid of lovely pink. Largely used with the preceding variety as a pot-plant for forcing, but both are perfectly hardy and very desirable for the flower-garden. 25 cts. each.

A. Arendsii hybrida. A new type of this most interesting and very valuable plant, especially for the subaquatic garden. The plants are of very vigorous growth, 2 to 4 feet high, densely branched; feathery plumes of delicate coloring. Award of Merit, Royal Horticultural Society.

A. hybrida carminea. Well-branched spikes of rosy lilac; 3 feet. 50 cts. each.

A. hybrida, Ceres. Well-branched panicles of a brilliant rosy color; 2½ to 3 feet. 35 cts. each.

A., Gruno. Finest of the pinks; light, graceful, spreading spikes; salmon-pink flowers; 4 feet high. 50 cts. each.

A., Pink Pearl. Thick, pyramidal spikes of lovely pink; 2 feet high. 35 cts.

A., Venus. Early-flowering, same habit as Ceres; brilliant rosy purple. 35 cts.

A., Salland. Very strong spikes of red flowers; 6 feet high. 50 cts. each.

A., Salmon Queen. Very graceful spikes of a fine, light salmon-pink; 2½ to 3 feet high. 35 cts.

A., Princess Juliana. The long spikes, growing 3 to 3½ feet high, have a loose and elegant habit; flowers bright crimson-pink. The darkest-colored Astilbe in commerce. 50 cts. each.

BOCCONIA cordata. A tall-growing perennial that grows well in moist ground. Foliage silver-green. The flowers come in July and August, borne on stout stems like plumes. 20 cts. each, \$2 per doz.

CALTHA palustris (Marsh Marigold). Bright yellow flowers early in spring; 1 foot high. 15 cts. each, \$1.50 per doz.

C. palustris monstrosa fl.-pl. Double-flowering. 25 cts. each, \$2.50 per doz.

C. palustris semiplena. New. Beautiful, semi-double variety; a great improvement on the single form and not so stiff as the double; borne on long stems. 35 cts. each.

C. polypetala. New. A gigantic form; large leaves and flowers early in spring. 50 cts. each.

CLETHRA alnifolia (Sweet Pepper Bush). One of the most charming of our native bushes; will succeed in almost any soil, but prefers a wet ground or margin of pond or stream; flowers white, of a very spicy fragrance. A desirable bush for the garden in any situation. 50 cts. each.

EUPATORIUM ageratoides (White Snakeroot). A strong-growing plant; most desirable for the semi-wild garden, growing 3 to 5 feet high, bearing a profusion of white blossoms in late summer. Good as a cut-flower. 15 cts. each, \$1.50 per doz.

E. cœlestinum. A beautiful, hardy plant, with light blue flowers similar to the ageratum; very free flowering; late summer. 18 to 24 inches. 15 cts. each, \$1.50 per doz.

FUNKIA undulata picta-media. The beautiful variegated Plantain Lily. Flowers in July on stems 2 feet high, lilac in color. 15c. each, \$1.50 per doz.

GENTIANA Andrewsii (Closed Gentian). A strong-growing plant, very pretty by the water-edge, with clusters of deep blue flowers in July and August. 25 cts. each, \$2.50 per doz.

GUNNERA scabra. One of the most remarkable of all ornamental foliage plants, the leaves often measuring 4 to 8 feet across. It requires very liberal cultivation and, needless to say, an ample supply of water at the roots at all times. They thrive best on the margins of ponds, where the roots can penetrate the moist ground. Select a spot open to the sun, yet sheltered by trees and shrubbery from strong winds. In winter give a heavy mulching of leaves, and fresh manure to hold the leaves in place. 75 cts. each.

HELENium autumnale superbum. A very attractive plant, growing 4 to 5 feet high, with broad-spreading heads of golden yellow flowers in late summer and fall months. 15 cts. each, \$1.50 per doz.

H. autumnale rubrum. A variety having bright terra-cotta flowers. 20 cts. each, \$2 per doz.

HARDY PLANTS, continued

Helenium, Riverton Beauty. A free-growing, distinct variety, having flowers of a rich lemon-yellow with a large cone of purplish black. 20 cts. each, \$2 per doz.

H. pumila. A dwarf variety with bright yellow flowers. 15 cts. each, \$1.50 per doz.

H., Riverton Gem. Of strong growth, $2\frac{1}{2}$ to 3 feet high; flowers brilliant old-gold, suffused with bright terra-cotta, changing to wallflower-red. 20 cts. each, \$2 per doz.

HEMEROCALLIS flava (Yellow Day Lily). One of the best-known varieties; flowers deep lemon-yellow; very fragrant; very attractive on the margins of ponds, flowering in July. 15 cts. each, \$1.50 per doz.

H. fulva. A stronger variety than the preceding; grows 4 to 5 feet high; flowers orange, with deeper shadings. 15 cts. each, \$1.50 per doz.

H., Dr. Regal. Very early flowering; a rich golden yellow. One of the very best Day Lilies. 20 cts. each, \$2 per doz.

HIBISCUS. New Hybrids. Probably no other hardy plant has increased in popular favor more than the Hibiscus. It has always been an attractive flower, with its large, white, pink and rose-colored flowers, but the hybrids are a new creation, not at all in the same class. The plants are vigorous and free flowering, often exceeding 6 feet in height, branching, with monstrous flowers 24 to 30 inches in circumference, in all shades of color; a large planting in bloom is a magnificent sight. Being perfectly hardy, the plants are well adapted to all sections of the United States and Canada. My selection comprises the choicest deep, rich crimson shades, together with pink and white. These can be grown successfully in the herbaceous border, where large plants are needed; they will succeed in any good garden soil, but to have them in perfection, plant in the water-garden or on the margins of ponds and streams, or in moist places. Selected varieties of White, Pink and Crimson, 35 cts. each, \$3.50 per doz. General assortment, \$2.50 per doz.

IRIS germanica. One of the best early-flowering varieties, in many shades of color. 10 cts. each, \$1 per doz.

I. germanica aurea. Golden yellow; distinct and fine. 15 cts. each.

I. germanica, Mrs. Neubronner. Golden yellow; extra. 25 cts. each.

I. orientalis. Rich violet-blue; early flowering; very free; a useful and distinct variety. Should be in every collection. 15 cts. each, \$1.50 per doz.

I. orientalis, Snow Queen. Snow-white variety of the preceding form; a distinct and very desirable companion. Extra. 15 cts. each, \$1.50 per doz.



Hybrid Hibiscus

HARDY PLANTS, continued

Iris pumila. New Hybrids. Very interesting and attractive, being one of the earliest and showiest of spring flowers; of dwarf habit and embracing shades of color, such as creamy white, lemon-yellow and royal purple and blue. 20 cts. each, \$1.50 per doz.

I. Kaempferi (Japan Iris). The Japan Irises are the elite of the Iris family. They thrive well in any good garden soil but do best where there is an abundant

supply of water. The margins of pools or ponds are ideal places to plant these Irises, which begin to bloom in June (shortly after the German Irises are through flowering) and continue through July. Plantings should be done early in the spring or in the month of September. My present collection of Japan Irises is secured from a noted specialist.

Please order by number rather than by names.

25 cts. each, \$2.50 per doz.

12. **Koko - no - Iro.** Six large, royal purple petals, with a yellow center.

17. **Yomo-no-Umi.** Deep lavender-blue, with a blue halo surrounding the yellow blotched six petals.



Japanese Iris

20. Rich purple, deep yellow throat marks; six petals.

21. **Ho-o-Jo.** Yellow blotch, surrounded by a dark blue halo, shading to rich velvety purple; six petals.

35. **Tsurigi-no-Mai.** Very double; dark blue-purple, overlaid clear blue; bright yellow bar.

38. **Fujimime.** Gray-white, with a blue halo radiating dark blue lines; petaloids dark violet; six petals.

53. **Zama-no-Mori.** Three immense white falls with strongly marked sky-blue zone in center; standards white, margined soft blue.

85. **Tuyi.** Tall; dark violet-blue, flaked white; three petals.

100. **Kumo-no-Uye.** Six large frilled petals; deep indigo-blue, shaded purple.

117. Very pale lavender; standards darker. Six petals.

156. **Gekka-no-Nami.** Six very large, creamy white, drooping petals; foliage light green.

Iris Pseudacorus. This is the common yellow water-flag, flowering in May and June. Planted in water about 2 inches deep, it reaches its perfection, growing to a height of 4 feet. 15 cts. each, \$1.50 per doz.

LOBELIA cardinalis (Cardinal Flower). One of the most attractive plants of our native flora, seen along streams and low, moist ground, sometimes a few spikes of rich, fiery cardinal flowers; again in masses, when the sight is brilliant and dazzling. 15 cts. each, \$1.50 per doz., \$10 per 100.

HARDY PLANTS, continued

- Lobelia, Illumination.** A sterling novelty, producing flowers just like *L. cardinalis*. The only difference is that the foliage is a handsome bronze-red. The beauty of the foliage makes it very striking. 25 cts. each, \$2.50 per doz.
- L. syphilitica.** Grown under conditions similar to those of the preceding variety, it produces large spikes of flowers 2 to 3 feet high, of a lovely shade of blue and occasionally white. 15 cts. each, \$1.50 per doz., \$10 per 100.
- LYTHRUM roseum, Perry's Variety.** A grand improvement on the well-known Rosy Loosestrife, with much larger flowers and longer spikes of a glistening cherry-red. Valuable for the aquatic garden, flowering freely from July to September. 25 cts. each, \$2 per doz.
- MAGNOLIA glauca** (Swamp Bay). A desirable shrub, with handsome, glossy foliage and sweet-scented, creamy white flowers, extending over a considerable period. Fine for the water-garden. 2 to 3 feet, 75 cts. and \$1 each.
- MYOSOTIS palustris** (Forget-me-not). A beautiful light blue flower with yellow center, growing by streams or in wet places. An almost perpetual-flowering plant. 15 cts. each, \$1 per doz.
- SAURURUS cernuus** (Lizard's Tail). A desirable plant for the margins of ponds or moist ground; grows 2 to 2½ feet high, with terminal, drooping spikes of white, sweet-scented flowers. 25 cts. each, \$2 per doz.
- SENECIO clivorum.** A plant of recent introduction from China, with enormous round leaves resembling somewhat the gigantic petasites, producing yellow flowers borne on stems 4 feet high. 25 cts. each, \$2.50 per doz.
- SPIRÆA Aruncus.** A noble variety, 3 to 5 feet high, producing in June and July long, feathery panicles of white flowers. 25 cts. each, \$2.50 per doz.
- S. palmata** (Crimson Meadowsweet). One of the most beautiful hardy plants, the deep purple-red of the stems and branches passing into the crimson-purple of the broad corymbs of flowers, which are produced very freely during June and July; 3 feet. 15 cts. each, \$1.50 per doz.
- S. elegans.** A free-flowering, silvery pink form of the above. 15 cts. each.
- S. ulmaria fl.-pl.** (Meadowsweet). Grows 2½ to 3 feet high; a double white form; fine for naturalizing. 25 cts. each, \$2.50 per doz.
- S. venusta.** A showy, red-flowering species; very fragrant; 4 to 5 feet; June. 25 cts. each, \$2.50 per doz.
- S. venusta magnifica.** A great improvement on the foregoing variety; the flowers are larger and the color is richer. 35 cts. each.
- STENANTHIUM robustum** (Mountain Feather Fleece). A tall-growing plant, with showy panicles of pure white flowers. 25 cts. each.
- STYRAX japonica.** A handsome shrub or small tree of graceful habit, well adapted to the water-garden. The flowers are white, sweet-scented, produced abundantly on medium-sized bushes; 3 feet. 50 cts. each.
- THALICTRUM dipterocarpum.** A charming perennial. Its flowers are produced on tall, graceful spikes, 5 to 7 feet high; they are rosy lilac and contrast beautifully with the citron-lemon of the numerous anthers. 35 cts. each, \$3.50 per doz.

PLANTS FOR SMALL AQUARIUMS

Aquariums, with a few water-plants and several goldfish, are quite popular as an ornament for the city home, and furnish an everchanging amusement for the whole family. As an assistant to the nature-study class in the public schools the aquarium is indispensable, for through it the pupils become acquainted with various forms of aquatic life—fish, mollusks, plants and algæ.

The fish must have water, but not stagnant, impure water, and the growing plants help to keep the aquarium clean and pure. When the aquarium is well balanced, that is, a given number of fish to the quantity of water, with sufficient plant-life to supply oxygen, then the aquarium is attractive and a source of

PLANTS FOR SMALL AQUARIUMS, continued

pleasure. The following plants are adapted to the purpose, a few or more according to the size of the aquarium.

ANACHARIS canadensis gigantea (Elodea; Water-weed). A beautiful, submerged plant, with elongated, branching stems, thickly set with sessile, whorled or opposite leaves. A rapid grower and one of the best oxygenators. 15 cts. each, \$1.50 per doz.

CABOMBA viridifolia (Green Fan-Wort; Washington Grass). A very interesting and popular plant. The light green leaf is fan-shaped, composed of filaments or ribs like a skeletonized leaf. 15 cts. a bunch, \$1.50 per doz.

EICHHORNIA crassipes major (Water Hyacinth). A curious and pretty plant in the aquarium, the long, silky, steel-blue roots reaching down in the water. The plant is of value in the aquarium during the breeding season, the roots being receptacles for fish-spawn. 15 cts. each, \$1.50 per doz.

HYDROCHARIS Morsus-ranæ (European Frogbit). A delicate, floating plant, with rather thick, heart-shaped leaves, about 2 inches across. Its fine, silky roots are beautiful and attractive in the aquarium, and the plant itself is most graceful. 20 cts. each.

LUDWIGIA Muleritii. One of the best and most useful plants for the aquarium, valuable as an oxygenator. The foliage is glossy dark green on the upper surface, the underside of leaf bright red. An attractive and distinctive plant. 25 cts. each, \$2 per doz.

MYRIOPHYLLUM verticillatum (Popular Green Milfoil). Very fine leaves, pinnately parted and capillary; color a beautiful soft green. 15 cts. each, \$1.50 per doz.

PISTIA Stratiotes (Water Lettuce). A very attractive aquatic, floating plant, with soft, light green velvety leaves; requires warm treatment in winter. 15 cts. each, \$1.50 per doz.

SAGITTARIA sinensis gigantea. This is the most popular of submerged aquarium plants, and quite indispensable, as it can always be had in a good condition; a free grower and oxygenator. Leaves strap-like and broader than the preceding variety, of a dark, rich green color. 15 cts. each, \$1.50 per doz.

UTRICULARIA vulgaris (Greater Bladderwort). A beautiful submerged plant, crowded with primae, many-parted capillary leaves, bearing numerous bladders. 15 cts. each, \$1.50 per doz.

VALLISNERIA spiralis. (Italian type.) An evergreen form of eel-grass best suited for the aquarium. It has long, narrow leaves and is an excellent oxygenator. 25 cts. each, \$2.50 per doz.

HARDY BAMBOOS

There seems to be something very fascinating about oriental things and the Bamboo is no exception to the rule. The beautiful foliage and the interesting canes are always attractive. They require a rich, well-drained soil. The banks of streams and the edges of ponds and pools make an ideal situation. The varieties listed are all hardy as far north as New York City and should be hardy even farther north if given a slight protection during the winter.

BAMBUSA aurea. Close-jointed canes; leaves light green, small and very graceful. \$1 each.

B. auricomma. A green-and-yellow variety; very pretty; will grow to 3 feet. \$1 each.

B. Fortunei variegata. A dwarf variety, about 18 inches high, with green-and-white foliage. 75 cts. each.

B. japonica. Slender, graceful, and very attractive. \$1 each.

B. nigra. A black-stemmed variety growing quite high; unique. \$1 each.

B. palmata. Undoubtedly the most attractive and satisfactory. Broad, rich green leaves, very dense in growth and growing about 2 to 3 feet high. \$1 ea.

B. Simonii. Strong, upright growth. \$1 each.

HARDY ORNAMENTAL GRASSES

The Ornamental Grasses are one striking feature in the garden in clumps, beds or borders, or on the margin of lakes, ponds, etc. In isolated clumps the Pampas is majestic; it is regrettable that it is not hardy. The next best is *Erianthus ravenne*. For large needs *Arundo Donax*, the tallest of all the giant Grasses—grows from 12 feet to 20 feet high—makes a very imposing center. Surrounded with cannas or *Caladium esculentum* and margined with *Pennisetum*, it has a most telling effect. The Eulalias are best planted in irregular beds or groups with *Pennisetum* for a border or edging. *Eulalia gracillima univittata* is the most graceful and may be planted very effectively near the water. For large beds *Arrhenatherum* makes a very desirable dwarf border plant.

ARRHENATHERUM bulbosum variegatum. A dwarf variegated Grass; fine for bordering where a white border is desired, as it retains its clear coloring all season. 15 cts. each, \$1.50 per doz.

ARUNDO Donax (Giant Reed). One of the most stately of all Grasses. 25 cts. each, \$2.50 per doz.

A. Donax variegata. A beautifully variegated form, not so tall-growing. 25 cts. each, \$2.50 per doz.

EULALIA gracillima univittata. The most useful and desirable of all the Eulalias. Its long, narrow, graceful foliage with silvery midrib renders it a very striking and distinct plant as a specimen or for grouping. 20 cts. each, \$2 per doz.

E. japonica variegata. A very ornamental Grass, 4 to 6 feet high, with long, narrow leaves conspicuously marked with green and white, with handsome plumes. 20 cts. each, \$2 per doz.

E. japonica zebrina (Zebra Grass). Very similar to the above variety, but the blades instead of striped are barred with yellow. 20 cts. each, \$2 per doz.

ERIANTHUS ravenne (Plume Grass, or Hardy Pampas). A very ornamental grass; flower-spikes 10 to 12 feet high; make a most desirable specimen or clump on the lawn. 20 cts. each, \$2 per doz.



A picturesque arrangement of Bamboos and Ornamental Grasses as background and screen. Garden of Mr. W. J. Kinsella, Jr., St. Louis, Mo.

HARDY ORNAMENTAL GRASSES, continued

PENNISETUM japonicum (Hardy Fountain Grass). This new addition to the Hardy Grasses is quite an acquisition; its habit of growth is heavier than the annual varieties; it grows from 3 to 4 feet high; foliage narrow, of a bright green, the flower-heads a silvery color, well above the foliage. 20 cts. each, \$2 per doz., \$15 per 100.

TENDER ORNAMENTAL GRASSES

PENNISETUM Ruppelianum (Purple Fountain Grass). A graceful plant with green foliage and purplish plumes. Fine border plant for cannas and similar plants. Annual. \$1 per doz., \$6 per 100.

P. cupreum. Another addition to this class of bedding plants; foliage dark, coppery bronze; plumes are of a tawny crimson; height 3 to 3½ feet. \$2.50 per doz., \$15 per 100.

P. macrophyllum atrosanguineum. Foliage bronzy red, a brighter and more pleasing shade than the bronze-leaved cannas; long, crimson plumes, 10 to 12 inches long; height 4 feet. \$2 per doz., \$12 per 100.

MAKING A WATER-GARDEN

ONE of a series of handbooks on garden-making, all of which were written by persons well qualified to present the subjects in a way that appeals to the amateur and the professional gardener.

“MAKING A WATER-GARDEN” was written by William Tricker, whose years of experience make him an authority on Water-Lilies and Aquatic Plants. The book contains a number of illustrations that “show how,” with clear directions about the cultivation and care. The price is 65 cts., postpaid. Your order may be mailed to

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